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recreational
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AN APPRAISAL OF POTENTIAL

Outdoor Recreational Developments

IN PARK COUNTY, MONTANA

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IN PARK COUNTY, MONTANA



PREPARED BY:

Park County Technical Action Panel

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P R E F A C E

The following report has been compiled as a result of appraising the potential for twelve outdoor recreational developments in Park County, Montana. This follows an inventory of the existing recreation developments, public and private, made earlier.

The information contained herein will be of help to groups and individuals in pointing out the potential for certain types of enterprises and areas in the county. Further, it may serve as a guide in evaluating the recreation possibilities for developing specific locations within the county. However, this report considers the county a unit, and no attempt has been made to appraise individual sites for recreation development.

This report was made possible through the cooperative efforts of many organizations and was prepared by the Park County Technical Action Panel.

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I N T R O D U C T I O N

Appraising the potentials for outdoor recreation is an essential step in planning to meet recreational needs. Opportunities for further development of resources for recreational uses in Park County were recently examined with the goal of stimulating county-wide growth. This appraisal involved a consideration of more than natural resources since development potential also depends upon people and facilities necessary for development.

The potential for twelve kinds of recreational developments were examined separately. Each had different criteria for evaluation depending upon the requirements of the activities involved. The objective - to make these appraisals without long and costly surveys - was achieved by a group familiar with the county and with the requirements of the different recreational developments. Information was obtained from various public and private sources. These included influencing elements, such as climate, highways, land use, and populations of people. The group followed a procedure, "Guide to Making Appraisals of Potentials for Outdoor Recreation Developments," prepared by the U. S. Department of Agriculture. This was essentially a group judgment process backed up by factual information. This procedure is described more fully as each kind of potential is appraised.

The end result of this appraisal process is a group of conclusions regarding the potentials for future development of the important kinds of recreation areas and enterprises in Park County. In addition to the general purpose of providing information needed for effective development of natural resources for outdoor recreation, these appraisals have other uses, including:

- Improving the long range program of the Park Soil and Water Conservation District;

- Providing information for publicizing and promoting outdoor recreation in the county;

- Providing information useful for local planning by county governments, planning board, and civic groups;

Provide information for developing regional and state outdoor recreation plans.

Identification of specific project proposals for public recreation areas;

Serves as guidelines to more efficient and profitable use of certain natural resources and thereby improve the economic status of individual landowners and the community;

Help meet the increasing demand of people for wholesome outdoor recreation.

DEFINITIONS OF TERMS USED

Local Area of Influence (LAI) - Park County together with the surrounding adjacent counties. The purpose of the LAI is to define the area where day-use recreation is important.

Selected Distant Urban Centers (SDUC) - the urban centers and cities outward from the Local Area of Influence of the county under consideration up to a day's travel distance (300 miles) that were selected as the locations from which vacationing people are most likely to come.

Statistics Work Sheet (SWS) - the form on which data is recorded and from which computations are made for use in analyzing certain key elements that apply to recreation potentials. Data includes census figures for populations of people, their age groups, occupations and income, highways data, land use information, and data on climate.

Key Element - any condition or situation that exerts a major influence on the potential for developing any important kind of recreation area or enterprise. Those that widely and commonly apply are: Climate; Scenery and Scenic Areas; Natural Areas; Historic Areas; Soils; Water-(existing water areas and impoundment sites); Wildlife-(habitat and populations); Populations of People-(size and distribution, age and occupations, income levels); Proximity and Access; Rural Ownership and Land-use Pattern.

Limiting Factor - a key element that exerts such a negative influence on the potential for developing a kind of recreation area or enterprise that it imposes problems that are difficult or impossible to overcome. This condition may apply over the entire county or to only certain portions of it.

In the appraisal process, three terms are used in arriving at a numerical evaluation. They are:

Multiplier (M) - a number that represents the weighted importance of the particular key element in relation to other key elements. Key elements that are significantly more important than others are assigned a weight number of two or more.

Rating (R) - a number from zero to ten applied to a particular key element to indicate the degree of excellence represented by the key element for a particular kind of recreation development. Zero means that the key element contributes nothing and ten that it is ideal.

Score (S) - a number which is the result of multiplying the "multiplier" (weight number) by the "rating" for a particular key element in appraising potential for a particular kind of recreational development. The sum of the scores of all the key elements applying to a particular kind of recreation development gives the numerical score for that kind of development.

Recreation Area - Any prescribed expanse of outdoor natural resources suitable for recreational use or used for that purpose, either developed or undeveloped.

Recreation Development - Any kind of an outdoor area now used for recreation, or planned to be established, or expanded and improved for recreational use.

Recreation Enterprise - A recreation development operated by an entrepreneur for profit.



KEY ELEMENTS

Ten key elements with several subdivisions were used to evaluate potentials for outdoor recreation in Park County. These were applied in various combinations to each kind of recreation development. Adjustments were made where the committee felt it was necessary.

Each of these key elements is discussed below as used in these appraisals.

A. Climate

Climate, as it affects various recreation activities and enterprises, can be either a contributing element or limiting factor.

Seasonal temperatures, precipitation patterns, sunshine and snowfall were considered. Climate was appraised, in part, relative to that where the recreationists are expected to come from.

B. Scenery and Scenic Areas

Attractiveness of the general surroundings affects the potential for many kinds of outdoor recreation. The natural qualities of the environment--topography, vegetation, wildlife, geologic formations--are the major elements. Manmade improvements or destruction--water impoundments, landscaping, gully erosion--may be important. For some purposes scenery was appraised relative to that of the areas where the majority of the recreations come from.

An inventory of scenic areas was made for the county. Each significant site or area of superior, distinctive, unusual or unique scenery that is not adequately developed for public use was named and located. (see Appendix A.)

C. Natural Areas

Areas of distinctive natural environment that are not badly influenced by urbanization, farming, mining, lumbering or other human changes are important for several recreation activities. Some of the natural areas in Park County have sufficient aesthetic and cultural interest to attract people to enjoy the areas or to study them. An inventory of undeveloped natural areas was made. This included distinctive areas of natural environment that represented associations of soils, rocks, water, vegetation and animal life essentially unaffected by man's changes (see Appendix A.)

D. Historic Areas

Sites where important events of history took place or historic structures and old mining towns offer opportunities for either public or private recreation areas. An inventory of local historic areas is given in Appendix A.

E. Soils

Soil conditions are of significance primarily in specific site planning. Soils also bear a vital secondary relationship to many kinds of recreation developments which will need new water sources. Clay soils present problems for using septic tanks, some of the loams are difficult for pond building and the shallow soils limit opportunities for cropping and vegetative development.

F. Water

Existing Water Areas

An inventory of existing water areas and potential impoundment sites in the county was made and is included as Appendix C. Because of the special significance of water areas to outdoor recreation, all significant water areas were included whether presently developed for recreation, partly developed or undeveloped. Streams, lakes and larger ponds with potential use for public outdoor recreation were included.

G. FISH AND WILDLIFE

Habitat

Food, cover, and water are essential elements of wildlife habitat which must be available to sustain populations of wildlife. The quality and quantity of this habitat is a result of the type and intensity of land use which in turn is, in part, a reflection of soil conditions. Open land wildlife (pheasants, grouse, antelope, etc.), woodland wildlife (deer, bear, elk, etc.), and wetland wildlife (ducks, geese, etc.) require different kinds of habitat. The suitability and quality of lakes, ponds, and streams for fish depends on such factors as water depth, temperature, degree of pollution and steadiness of flow.

While this element has its prime significance in relation to hunting areas, fishing waters and natural areas, it also has importance for Vacation Cabins, Cottages and Homesites, Camping Grounds and Vacation Farms.

Populations

Populations of various species of wildlife attract and are used by recreationists in different ways. The game species have particular importance for hunting and fishing.

H. Populations of People

Population--Size and Distribution

Populations of potential users are important to all kinds of recreation development potentials. Population figures for Park County, adjacent counties and selected distant urban populations of urban centers were used in relation to their distances from Park County and the kind of recreation developments they might use. Day use activities are generally limited to the Local Area of Influence, week-end trip activities to the Selected Distant Urban Centers--Great Falls, Billings, Helena, Bozeman, Butte--and vacationing activities to all of the SDUC's.

The projected census data for populations used were:

LAI (Gallatin, Meagher & Sweet Grass Counties)

1965 47,878

1970 56,155

Population--Age and Occupation

Certain characteristics of the population influence the potential for development of some kinds of outdoor recreation areas. Age and occupation are key elements and were included in the appraisal for several kinds of recreation areas.

	% of Population in Age Classes (Years)		
	15-29	30-44	45 & over
LAI	24	18	31
U. S. Average	20	20	29

1960 Occupation Data used were:	% of Employed Who are:	
	<u>Professional</u>	<u>Skilled</u>
LAI	13	11
U. S. Average	20	32

Park County ratings were adjusted according to the U. S. average in the categories where age groups and occupation are important factors.

Population--Income Level

The economic well being of the recreation public has a major influence on the recreation potential. Family income is of such importance that it has been analyzed as a separate item. Median Family Income is used as an index of how much money will be spent for recreation.

The basic income figures are based on 1960 estimates.

LAI	5,232
SDUC's	6,354
U. S. Average	5,657

Using a rating of seven for median family income in the \$5,600 bracket, and adjusting a point for each \$500 variation, the LAI median family income rates six and that for the SDUC's nine.

I. Proximity and Access

The importance of the distance of the recreation area from its source of clientele varies by degree depending upon the kind of development. Proximity for purposes of outdoor recreation is almost wholly measured by means of the public road system. For some kinds of recreation areas, the additional element of access is involved. Park County has an adequate road system and almost complete access to all areas for all types of recreation. It has 709 miles of all-weather roads in its land area of 1,681,440 acres. It also has 161 miles of major tourist routes.

J. Rural Ownership and Land Use Pattern

The ownership and land use pattern of rural areas has particular bearing on the potentials for developing Vacation Farms or Ranches and Hunting Areas.

The potential for vacation farms or ranches depends in part upon the existence of farms or ranches having substantial farmsteads or ranch headquarters and having farming or ranching operations that are of interest to urban people. Size of property is also important but may be provided on adjacent public or private land as well as on the farm or ranch property.

The importance of farm ownership pattern for hunting area development may lie in the feasibility of developing hunting cooperatives or in having large enough properties to organize a hunting enterprise.

This element may also occasionally have some relevance to other types of areas, such as Natural, Scenic and Historic Areas.

The key statistics relative to vacation farms and hunting potentials which were used are:

<u>Size of Farms</u>	<u>Total Acres</u>
100-139 acres	1,496
140-179 acres	3,761
180-219 acres	2,030
220-259 acres	2,612
260-499 acres	23,224
500 - 1000 acres	53,548
over 1000 acres	794,303
Acreage of public land open to hunting	893,772



APPRAISING POTENTIALS FOR TWELVE TYPES OF RECREATIONAL DEVELOPMENTS

Twelve types of outdoor recreation developments were studied and analyzed for Park County.

1. Vacation Cabins, Cottages & Homesites

Vacation cabins, cottages, and homesites represent rural living space close to various recreation activities. They include living space developed to lease to clients, vacation homes built to sell, and organized group "camps" that use permanent building. Various recreation activities may be available on the premises. Other activities may be available in the vicinity on other areas, both public and private. These include cabins for summer recreation activity as well as cabins for winter sports activities.

Park County has a high potential for development of cabins, cottages and homesites.

Existing cabin areas on National Forest lands are located primarily on the Main and East Fork of Mill Creek. Concentrations of such developments on private areas are found along Mill Creek, Pine Creek and along the Yellowstone River.

The greatest potential for further development is along the Yellowstone River.

Availability and price of private land are limiting factors. There will be no new sites available on the National Forest land. The availability of excellent hunting and fishing opportunities is a great asset for summer home development. In addition, the availability of outstanding scenery and opportunities for hiking and pack trips make Park County almost ideal.

One of the greatest needs in developing additional cabin areas is for rural zoning. Many of the best cabin sites may have a higher value for public or commercial recreation sites. There is also a need for group planning so that adequate water, sanitary and utility systems can detract greatly from the scenic values and occupy some of the better land.

Climate is more favorable than much of the surrounding areas in Montana. Pleasant daytime temperatures, cool nights, and moderate precipitation give Park County a rating of 7.

Scenery is outstanding and will be rated 9. Outstanding attractions are many but include Yellowstone Park, the Bridger Range, the Crazy Mountains, the Absarokee Range, the Gallatin Range, and the Yellowstone and Shields River valleys.

Natural Areas are an interesting part of the drawing power of their locality for tourist and other vacationing. Many areas remain undeveloped, such as the mountain areas. Element rating - 8.

Soil Characteristics such as depth, permeability, texture and slope were considered because of their effect on the potential for vacation cabins, cottages and homesites. Adequate water supplies are available in most areas where building might be feasible. Element rating - 9.

Water - Existing water areas in the county include the Yellowstone River, the Shields River and Dailey Lake. Element rating - 7.

Impoundment sites within the county are located on Mill Creek, Trail Creek, the Shields River Ranch, Cottonwood Creek and Flathead Creek. Some of these are not ideal for homesites, however, some are relatively close by and could adequately serve as recreation areas for home sites. Element rating - 8.

The size and distribution of the population has a significant influence on the potential for vacation cabins, cottages and homesites enterprises. In a radius of 300 miles outward from the center of the county it would involve clientele of several urban areas. Many of these people seek a change from their city life. Others outside of this area are also potential customers. Element rating - 7.

Income level of vacationing population is also important in determining recreation development. With a median family figure of \$6,354 for this area, the county was given an element rating of 7.

Proximity to other larger urban areas is also a key element. Within the 300 mile zone there are eight larger towns as well as several smaller centers. These with tourists represent a good source of clientele for weekend visits, as well as vacations. Element rating - 8.

Access Roads in most areas of Park County are average to good, taking into consideration all weather roads. Element rating 5.



II. CAMPING GROUNDS

Three different types of camping areas and enterprises are recognized since there is considerable variation in the key elements that apply. These are: Vacation site camping grounds where the camper frequently stays several days to several weeks; pack trip camping involves a headquarters for a horse or canoe camping trip and an extensive area of natural or wilderness country, frequently public lands; transient camping grounds where the camper stops overnight while traveling to a vacation site. Sometimes a succession of stops at transient sites making up a camping vacation.

The vacation site camping ground is a pleasant area organized to accommodate families and others vacationing with tent, camper or trailer facilities. While an enjoyable environment of attractive climate and scenery is the main idea, supplementary recreation activities are usually desired, either on the premises or nearby. Most commonly associated with camping are swimming, fishing, boating and nature study. Both public and private areas cater to the vacation camper. Public camping grounds are associated with distinctive natural areas such as designated park and recreational areas and are limited to simple facilities and little or no services. There is an additional need for more campgrounds.

The potential for vacation sites camping grounds in Park County is high. The high ratings for most elements considered contribute to this future potential.'

Pack trips are rated as a high potential with a score of 87 of a possible 100. Several natural and wilderness areas are found in the country. The Crazy Mountains, the Absarokee and Gallatin Ranges make interesting and very scenic areas for pack trips either by foot or horseback.

Transient camping grounds serve a quite different purpose from the others. The most important key element for transient camping grounds is the tourist route. The transient potentials are adjacent to such highways, a mile or less away. Potential for transient camping grounds is largely for private enterprise. The emphasis is on convenience and facilities, including automatic laundries, shower baths, sewage disposal connections, supply store and similar facilities. Due to the proximity of Yellowstone Park and major hiways, such as Interstate 90 and U.S. 89, Park County has a high potential for developing transient overnight facilities, probably the highest potential area is around Gardiner.

KEY ELEMENTS AND FACTORS AFFECTING POTENTIAL

Climate is very important in camping grounds potential, particularly vacation site and pack trip types. The cooler areas are favored during the summer months. Since vacation camping is mostly a family activity, clientele for camping come from a wide area. With the passing of time, the popularity of weekend camping trips is increasing. Warm days and cool nights as found in Park County are a desirable condition.

Scenery is equal to climate and natural areas in importance for vacation site and pack trip camping potential. In Park County, the scenery on both private and public land is exceptional. However, the scenery found on public lands overshadows that found on private as most of the mountain areas in public ownership are covered with evergreen trees. There is a choice of several forested mountains, small flowing streams, distant views and varying geological formations.

Natural areas primarily limited to the mountains are present for the pack trip as well as for vacation site camping grounds. There is a potential for development near and on these areas, both public and private.

Soils for these types of enterprises are not a limiting factor. Generally, drainage will not be a problem and water is generally accessible.

Existing water areas are closely associated with the development of vacation site camping areas. Streams, lakes and ponds are commonly chosen as locations for both public and private camping grounds. The shorelines of the Yellowstone is a potential for camping sites at present. Additional camping sites can be developed in the mountain areas, along the rivers and streams, and some of the existing ponds in Park County.

Water impoundment sites offer considerable potential for vacation site camping. These are mainly opportunities for private development. However, some large impoundment sites could be developed by public agencies. Potential for small size impoundments is very good. The larger sites would provide fishing, swimming and possibly row boating.

Tourist route highways are vital for transient camping potential. There are two highways traversing Park County, which connect well known camping regions.

Access roads for vacation site and pack trip camping are adequate under present use. However, additional access roads will be needed for any future development.



III. Picnic and Field Sports Areas

These are basically areas developed for concentrated play activities, other than golf, water sports and winter sports. Competitive games using ball diamonds, courts, tracks and the like are one type of development. Others include shooting sports, bicycling and picnicking. There are also a few highly specialized types, including tracks for power vehicles such as "go-carts."

This enterprise was given a low rating in Park County as there are no heavily concentrated areas of population necessary to make a venture of this type successful.



IV. FISHING WATERS

Fishing waters as recreation areas include any type of water area with significant opportunities for catching fish by sport fishing methods. The fishing waters enterprise may include ownership, management and control of the waters, plus services, or it may be limited to furnishing access and services at public waters.

While there are many variations according to the species of fish involved, the major division is between warm water and cold water fishing. Cold water fishing concerns various species of trout. Warm water fishing includes all other fish.

Fishing water potentials are heavily dependent upon existent or developable waters and fishery management possibilities.

With the abundance of streams in Park County the rating for fishing for cold water species is high. Warm water fishing has a very low potential and was not rated. Park County is well known for its excellent fishing in the Yellowstone River, many small lakes, reservoirs and streams.

The effect of climate in determining whether waters are suitable for warm or cold water fish species is covered under the next three elements. Climate also affects fishing waters potential in other ways. Seasons suitable for fishing depend upon climate. Cold water species are seasonally regulated. Comfort while fishing, and its effect on the desires of fishermen, is a matter of climate. Element rating - 10.

Existing water areas have a high potential for fishing in this county. Most of the waters have fishable populations. Element rating - 7.

Several large water impoundment sites offer opportunity for expanding fishing waters with additional area. These sites hold potential depending on water sources and construction. In addition, smaller, deep ponds that are fed by springs make trout ponds and have added potential. These new trout waters may be particularly important as fishing enterprises. Element rating - 7.

Knowledge of the species of fish well-adapted in the area is very important when evaluating potential for increasing fishing water enterprises. This area abounds with popular sport fishes, such as Rainbow, Brown and Eastern Brook trout as well as whitefish.

The size, distribution and occupations of the human population is a factor in evaluating growth potential. A large portion of fishing is based on local clientele: however, fishermen come to Park County from distances of 200 miles or more. Element rating - 5.

Proximity to the population center of the county and nearby areas affects the development potential for fishing waters enterprises. This element is measured along the network of highways. The guide used to measure the potential for cold water fishing was a two-hour driving distance. Element rating - 3.



V. Golf Courses

Golfing activities are in two categories: First, standard golfing with courses of nine or eighteen holes and the newly popular par-3 type; Second, driving ranges and miniature golfing.

The key elements for golfing are largely related to size and distribution of population, income level and proximity to cities.

This enterprise was not given a rating for Park County as the size and distribution of population is a major limiting factor.

Livingston has a fine nine hole course with grass greens that should be adequate for a town of its size.



VI. HUNTING AREAS

The hunting areas recreation category for purpose of this evaluation is divided into three subdivisions: small game, big game, and waterfowl. The key elements affecting these divisions are substantially different and thus will be considered separately. Small game includes both birds and mammals. Pheasants, grouse, wild turkeys and Hungarian partridges compose the game birds. Cottontail and jack rabbits, raccoons, foxes, coyotes, and other small four footed animals are classed as small non-game mammals. Big game consists of mule deer, white tail deer, elk, moose, mountain sheep, mountain goats, grizzly bear, black bear, and prong-horn antelope. Waterfowl includes ducks and geese.

Recreational hunting areas are areas of land and water, public or private, where wild game is produced by habitat manipulation through farming, forestry or game management methods. Small game is predominately produced and harvested both on private and public lands. Waterfowl is produced and harvested both on private and public lands and water.

Hunting is regulated by State laws for sedentary species and by Federal and State laws for migratory species such as waterfowl. Hence, the potential for private development of hunting areas is influenced by these regulatory measures as well as by the elements considered below. The limiting effect of current game laws on this potential has been taken into consideration.

Park County furnishes substantial opportunity for all three types of hunting. Big game hunting throughout the county is excellent and rates the highest potential. Small game and waterfowl are both somewhat lower, but, in conjunction with big game hunting the three go together to uphold a very worthwhile potential.

Climate affects the usefulness of an area for hunting since it either facilitates or impedes the hunters mobility and comfort. It also affects the degree of activity of game. The influence of climate on productivity and mortality of game is covered under "Wildlife Habitat" and "Wildlife Populations" below. Therefore, the rating was given as a reflection of the effect climate has on the hunting process rather than on the game itself. Climate is generally not a restricting element on the three types of hunting. Element rating - 10 for all classes.

Soils have specific correlations with the productivity potential of areas for particular species of wildlife. Soils, habitat and wildlife populations are interrelated. The quality and quantity of habitat is reflection of land use which determines wildlife population.

Wildlife habitat is the basic element that determines potential for hunting areas. As here used, it includes the influence of climate on productivity and mortality, existing and potential, and includes water areas. Analysis of this element was made for each species of huntable wildlife for the county. These individual game--small, big and waterfowl. Element ratings 7, 9, and 5 respectively.

It is important that the habitat element not be confused with the wildlife populations element. The existence of good populations is evidence of good habitat, but the reverse is not necessarily true.

Wildlife Populations are dependent on other land uses. The population reflects habitat quality. Farming operations, grazing and land use all are factors in determining ultimate population. In many places, control of populations through manipulation of seasons and bag limits is necessary to keep populations within carrying capacity.

The size and distribution of the human population is the most important of the non-resource elements affecting hunting area potential and is significant for all three game types. For small game, the population considered was that of the LAI--element rating 3. For big game and waterfowl, Park County plus an area extending outward to include urban areas up to 300 miles away was used. Element ratings: Big game - 5, waterfowl - 3.

The income level of the human population in the LAI and the closer SDUC's is of importance in appraising waterfowl hunting potential. Since good waterfowl hunting commands a relatively high price, it is to some extent related to the hunter's income. Element rating - 7. Proximity to cities is a significant element only for small game hunting areas. Element rating - 1.

The pattern of rural ownership is an important element in appraising potential for small game and deer hunting areas. Public agency ownership, corporate ownership, and ownership in large private farms are favorable for facilitating hunting. Private estates, suburban developments, small rural home units of urban workers, and small farms are not as favorable. The criterion is based on the ease of making the hunting areas available to the public on either a free access or fee access basis. Element rating - 10.



VII. NATURAL, SCENIC & HISTORIC AREAS

Natural areas and scenic areas have much in common. Most natural areas of significance have attractive scenery. Many highly scenic areas have natural areas included. Nevertheless the two concepts are quite different. Natural areas are valued for their esthetic, scenic, wild and undisturbed character. Scenic areas are valued for their beauty. Both natural and scenic areas were inventoried specifically for the county. Their potential for increased use was appraised. The amount of new servicing facilities that would be needed to accommodate the increase in use was considered. Some of these areas are not yet used appreciably, therefore, estimates were made on the basis of increased local recreation participation in relation to the present level.

Historic areas are sites of past events that are of sufficient interest to attract people seeking to learn and observe the background of their heritage. They range from Lewis and Clark Trail and the site of one of their camps to old mining camps such as Aldridge.

Natural, scenic and historic areas, when considered as recreation attractions in themselves and having potential for increased use, are viewed mainly as tourist or vacationer attractions. The key elements for each of these kinds of areas are given below.

The existing undeveloped natural areas of Park County have a high potential. The historic area potential is medium, due to the fact that most of the sites are of local interest rather than nationwide.

Attractive scenery is very important in appraising many kinds of natural areas, but not for all. The scenic areas in Park County are in the mountains. Because of the vast mountain ranges, much of it is undisturbed. Much of the area is accessible by highways. Forest roads and trails lead to many beautiful areas.

Natural areas in the county were rated both as to their natural qualities and their contribution to scenic areas. The criterion used for rating was whether such areas had the characteristics to attract people to use them, either as public or private operations. The small school-type "natural areas" used for children's nature study, for example, was not considered. Some of the types of areas included were: extensive, roadless wooded areas, undeveloped river and creek shores. Natural areas characteristics can contribute greatly to the value of scenic areas. Hills and forests unspoiled by roads, mining and over-cutting add materially to the scenic values. Likewise, interesting vegetation, animal life and geological formations in their untouched and uninhibited states add much to the scenery. Wildlife habitat as an element becomes a part of the natural area in this context. Element ratings: natural areas 10. Scenic areas - 10.

The historic areas of the county were inventoried and have been summarized in Appendix A. Many of the sites have not been developed to their fullest potential. The major portion of the sites are of local interest rather than nationwide. Element rating - 5.

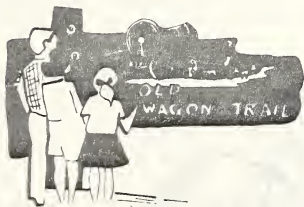
Wildlife populations are frequently a particular and attractive part of a natural area and often deserve special attention. Deer, elk, moose and bear are found in abundance throughout the county. Wildlife need not be rare or unusual to have great attraction. The common birds, mammals, reptiles, amphibians and insects in their natural surroundings are a fascinating part of many natural areas in the county. Element rating - 7.

The size and distribution of the human population is important to all three kinds of areas in this group. It is more apt to be of greater significance for scenic areas than for the other two. The population of the LAI plus nearby SDUC's was used as the basis for this rating, namely 7.

Proximity to cities affects the potential for use of natural, scenic and historic areas. The three SDUC's within 150 miles were considered in arriving at the rating for this element of 8.

Tourist routes affect the potential for development of all three kinds of areas and especially where the areas are of a quality to attract more than local trade. Park County is traversed by 161 miles of major tourist routes which gives a 5 rating.

Access roads reach into nearly all of the natural and scenic areas of Park County. Element rating - 8.



VIII. RIDING STABLES

We are concerned here with enterprises involved primarily with horseback riding. Thus, the riding that occurs far from cities on vacation farms and guest ranches is covered under those types of enterprises.

Size and distribution of the human population is a very important element. This involves not only the location of urban centers but also of concentration points of vacationing people. Thus, the potential for riding stables is affected by large numbers of people visiting State and National parks and the like.

Proximity to urban centers consisting of populations of 20,000 or more is a vital key element for riding stables.

Park County was not rated for this type enterprise due to the small population, distance to large urban areas and the presence of a large number of private horses available to the majority of the people.



IX. SHOOTING PRESERVES

Shooting of stocked, domestic game under conditions simulating natural hunting has been done in parts of the U. S. for several decades. Some of these shooting "preserves" have been club arrangements and some commercial. However, the interest in this type of recreation has grown rapidly since World War II and its potential still lies in the future.

Almost all of the game used on shooting preserves is of four species: ring-necked pheasants, bobwhite quail, chukar partridge and mallard ducks.

The operation is a combination of two or three activities: Farming the land to grow crops and control vegetation; Raising game or purchasing it from a game farm; Raising, training and handling hunting dogs. It is therefore, a complicated and demanding kind of enterprise.

Climate has a general influence on the suitability of areas for shooting preserves. Since most of the shooting activities are limited to the fall and winter months, climate is a limiting factor in Park County. Most of the business comes on weekends so there must be a long enough season of good weather to permit an adequate volume of business to justify the enterprise.

Population size and distribution is critical in appraising potential for this type of enterprise. The population in urban centers of 20,000 or more in the LAI is a suitable indicator. This is a limiting factor in Park County.

Proximity to urban centers is also very important in this enterprise. The proportion of the highway system in the county that is within 40 miles of urban centers of 20,000 or more that are in the LAI is the criterion used. Again this is a limiting factor in Park County.

Shooting preserves in Park County was not given a rating due to the limiting factors previously listed.

X. VACATION RANCHES

A vacation ranch may offer home-cooked meals and country living or light housekeeping facilities, rented on a weekly basis, for urban people. A Vacation Ranch is heavily resource-oriented and often places emphasis on a variety of ranching activities. It is strictly rural in its "atmosphere." Recreation activities may include fishing, horseback riding, "wrangling" and games.

The potential for Vacation Ranch enterprises in Park County is high.

Climate during the summer vacation period in Park County is very attractive. It is a favorable change from that in most urban areas where the potential clientele come from. Cool nights and warm days are dependable for vacation ranch enterprises. Element rating - 9.

Scenery is important in evaluating potentials for this enterprise. Very attractive surroundings are beneficial. However, as with climate, this is a relative matter. The scenery needs to be very attractive in relation to that where the clientele come from -- the city - suburb areas. Scenery was evaluated in comparison with that in the SDUC's and in competing vacation areas. Element rating - 9.

Natural areas are an important element in the evaluation of vacation ranches. They do not necessarily have to be on the property that may be in this business, but must be nearby. They are a part of the drawing power of an area for the kinds of vacations sought on ranches. The inventory of natural areas for the county is included in Appendix A and indicates its significance in encouraging and supporting this kind of enterprise. Element rating 9.

Existing water areas enhance the possibilities for developing adjacent farm lands for vacation purposes. Many other smaller streams and ponds on ranches are also significant for this kind of enterprise. Element rating - 10.

XI. WATER SPORTS AREAS

Areas of land and water devoted primarily to swimming, sun bathing, boating, and water skiing are among the most popular for outdoor recreation today.

The projected increase of demand for such facilities is high. Enterprises using land and water primarily for fishing are covered under "Fishing Waters." Other activities covered in this report such as picnicking and camping, are frequently associated with water sports areas. Here, however, the water sports are considered the primary activity.

Park County has a medium potential as a water sports area.

Climate is somewhat limiting to water sports development in the county. The use for swimming and water skiing is limited to the 4 or 5 month summer period. The boating is also restricted by the winters. Element rating 4.

While scenery is not one of the more important elements affecting water sports, it is still important. Areas of scenery in view from existing water areas were considered in terms relative to the general scenery of the county. Element rating 7.

Existing Water Areas. The most heavily used lake for this purpose in the county is Dailey Lake. There is, of course, a limit to the number of boats that can use this lake at a given time. Power boating requires three acres of open water per boat while water skiing requires five acres.

The Yellowstone River has the most potential for development in this category. Float trips are becoming more popular every year. The annual Yellowstone River Float begins at Livingston and goes to Billings and is also gaining in popularity.

There are also other smaller lakes and streams as well as high elevation alpine type lakes that provide recreation. Element rating 4.

Potential Water Impoundment Sites are a very important key element. There is a potential for development of new reservoirs on Mill Creek, Trail Creek, Flathead Creek, Daisy Dean Creek, Cottonwood Creek and the Shields River Ranch.

Most of these would be large enough to allow boating or water skiing. Element rating - 10.

Size and distribution of population is an important element here. Since swimming and boating are heavy day-use activities, the waters must be near heavy populated centers to develop full use. Since most of the water areas in Park County are located far from populated centers this is a limiting factor. Element rating - 1.

Age and occupation of the population affects the potential for water sports areas. Swimming is heavily a youth activity, and boating is a young family activity. Boating is more popular in the families of the skilled labor group. The age group from 15 to 44 in the local area was used as the age criterion. Element rating - 3.

Proximity to cities is a significant element in appraising this potential. Billings and Bozeman are the only larger towns within the immediate area which would affect the county. Element rating - 1.



Rural ownership and land use patterns have a strong influence on the potential for vacation ranches. A favorable pattern for potential vacation ranches is a long-stabilized ownership of family-type ranches of medium size, 1000 acres and larger with general ranching and livestock enterprises. These often have large and quite old ranch homes. Many ranches in the county meet these guidelines; approximately 50% are in the 1000 acres and larger size group of the nearly 482 ranches in the county. Most are stock ranches. Element rating 5.



XII. WINTER SPORTS AREAS

Winter sports generally center around skiing. Additional activities that may be offered include ice skating, sledding, ice hockey, sleigh rides, and snowmobile trips. All are dependent on the kind of winter weather prevalent in the area. While skiing is often the hub of the developments, this appraisal is based on all winter sports.

Climate for a good winter sports area potential must have; Long winters; a large number of below-freezing days; snowfall that is frequent and substantial. These characteristics of the climate were judged for the mountainous areas of Park County. A season of 120 days or more is needed for the economical operation of many winter sports, particularly skiing. This period was measured from the date of the first 16 degree F temperature in the fall to the last one in the spring. A minimum of 60 inches of snowfall per season is needed, with a preferred ten inch accumulation or more at all times required for use. The snowpack exceeds 60 inches in many areas in the county. Normally low temperatures provide excellent powder snow conditions. Temperatures throughout the county meet the 120 day requirement. The continental climate provides rapid clearing after storms with many sunny winter days. Element rating - 8.

The scenery element in appraising winter sports area potential includes the esthetic aspects of the scene. In general, the scenery needs to be attractive, as hilly, wooded areas go for certain developments of local use. The wider the appeal is to be for clientele -- and hence, the broader the competition for business -- the more choice the scenery must be. Element rating - 9.

The soils element was examined only for locations in the county where skiing might be developed. Favorable soil properties for skiing areas are adequate soil depth to grow good grass and prevent slippage and erosion, medium texture. and good drainage. Adverse soil properties include shallowness, poor drainage, excessive stoniness or rockiness. In a strict sense, high class skiing areas require units

of 100 acres or more of slopes from ten percent to sixty percent lying on north to northeast exposures. Also, they need to have a relatively level area of several acres adjacent to the slopes. Element rating 8.

Size and distribution of population for local developments, concerns the population of urban centers of 5,000 or more in the LAI within 20 miles was used as the criterion. Element rating - 1.

Income is an important element, especially for skiing. The LAI \$5,232 median family income gave a score of seven for this element.

Proximity to cities affects winter sports area potential somewhat more strongly than many other kinds of activity areas due to the greater difficulty in winter travel.

The proportion of the highway system between the potential winter sports localities in the county and the urban centers of 5,000 or more in the LAI within 20 miles was used as the criterion. Element rating - 1.



XIII. SNOWMOBILING

Snowmobiling is a new winter sport to Park County, dependent on the prevalent winter weather.

Climate for good snowmobiling must have: Long winters below-freezing days; snowfall that is frequent and substantial. These characteristics of the climate are found in the mountain areas of the county.

A season of 209 days are available for snowmobiling. This period is measured from the date of the first 16 degree F. temperature in the fall to the last one in the spring.

The scenery element in appraising winter snowmobiling area potential includes the esthetic aspects of the scene. In general, the scenery needs to be attractive, as hilly, wooded areas go for certain developments of local use. The wider the appeal is to be for clientele -- and hence, the broader the competition for business -- the more choice the scenery must be.

The age of the population: All age groups enjoy snowmobiling.

Proximity to cities affects snowmobiling area potential somewhat more strongly than many other kinds of activity areas due to the greater difficulty in winter travel. The proportion of the highway system between the potential snowmobiling localities in the county and the urban centers of 5000 or more limits the use to local residents.

Access roads present special problems for snowmobiling areas due to winter weather.

Park County has a medium potential for snowmobiling.



SUMMARY OF APPRAISALS OF POTENTIALS FOR OUTDOOR RECREATION

DATE OF APPRAISAL APRIL 1967 IN PARK COUNTY PARK SOIL (& WATER) CONSERVATION DISTRICT OF MONTANA STAT

KINDS OF RECREATION DEVELOPMENTS	SCORES FOR KEY ELEMENTS (RATINGS X MULTIPLIER)														TOTAL SCORE	APPRAISAL (ADJECTIVE)		
	CLIMATE	SCENERY	NATURAL AREAS	HISTORIC AREAS	WATER ARS.		MID- LIFE	POPULA- PEOPLE		INCOME LEVELS	PROXIMITY	PROX. & ACCESS						
					EXISTING	IMPOUNDMENT SITES		HABITAT	POPULATIONS			SIZE & DISTRIBUTION	AGE & OCCUPATION	ACCESS			TOURIST ROUTES	RURAL OWNERSHIP AND LAND USE PATTERN
I. VACATION CABINS, COTTAGES, & HOMESITES	14	18	8	xxx	9	14	16	xxx	xxx	7	xxx	14	8	5	xxx	xxx	113	High Poten
II. CAMPING	14	18	18	xxx	9	7	14	xxx	xxx	xxx	xxx	xxx	xxx	5	xxx	xxx	85	"
-PACK TRIP	21	27	30	xxx	xxx	9	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	87	"
-TRANSIENT	7	9	xxx	xxx	9	xxx	7	xxx	xxx	xxx	xxx	xxx	xxx	xxx	40	xxx	72	"
-GAME, PLAY, TARGET AREAS	--	xxx	xxx	xxx	--	xxx	xxx	xxx	xxx	--	--	--	--	--	xxx	xxx	--	Low Poten
-BICYCLING	--	xxx	xxx	xxx	--	xxx	xxx	xxx	xxx	--	--	--	--	--	xxx	xxx	--	--
-PICNICKING	--	xxx	xxx	xxx	--	xxx	xxx	xxx	xxx	--	xxx	xxx	xxx	xxx	xxx	xxx	--	Low Poten
-WARM WATERS	--	xxx	xxx	xxx	xxx	--	xxx	xxx	xxx	--	xxx	xxx	xxx	xxx	xxx	xxx	--	None
-COLD WATERS	10	xxx	xxx	xxx	xxx	21	14	xxx	18	xxx	5	xxx	3	xxx	xxx	xxx	71	High Poten
V. GOLF COURSES	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	--	Low Poten
-STANDARD & PAR-3	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	92	Medium
VI. HUNTING AREAS	10	xxx	xxx	xxx	xxx	9	xxx	xxx	35	21	6	xxx	xxx	1	xxx	xxx	102	High
-SMALL GAME	10	xxx	xxx	xxx	xxx	10	xxx	xxx	45	27	10	xxx	xxx	xxx	xxx	xxx	76	Medium
-BIG GAME	10	xxx	xxx	xxx	xxx	9	xxx	xxx	25	15	3	xxx	14	xxx	xxx	xxx	135	High
-WATERFOWL	10	xxx	xxx	xxx	xxx	9	xxx	xxx	25	15	3	xxx	14	xxx	xxx	xxx	130	High
VII. NATURAL, SCENIC, AND HISTORIC AREAS	xxx	40	60	xxx	xxx	xxx	xxx	xxx	7	7	xxx	xxx	8	5	8	xxx	64	Medium
-SCENIC AREAS	xxx	50	40	xxx	xxx	xxx	xxx	xxx	14	xxx	xxx	8	10	8	xxx	xxx	--	Low Poten
-HISTORIC AREAS	xxx	xxx	25	xxx	xxx	xxx	xxx	xxx	7	xxx	xxx	8	xxx	xxx	xxx	xxx	--	Low Poten
VIII. RIDING STABLES	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	--	Low Poten
IX. SHOOTING PRESERVES	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	--	None
X. VACATION FARMS AND RANCHES	27	27	27	xxx	xxx	10	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	15	106	High Poten
-FARMS	4	7	xxx	xxx	xxx	16	30	xxx	xxx	2	3	xxx	1	xxx	xxx	xxx	63	Medium
-RANCHES	32	9	xxx	xxx	xxx	24	11	xxx	xxx	5	10	7	1	5	xxx	xxx	93	Medium
XI. WATER SPORTS AREAS																		
-WINTER SPORTS AREAS																		
A.	B.	C.	D.	E.	F.	G.	H.	I.	J.	K.	L.	M.	N.	O.	P.	Q.	R.	S.

APPENDIX A INVENTORY OF NATURAL, SCENIC AND HISTORIC AREAS

NAME OR IDENTITY OF AREA	TYPE OF AREA	LOCATION TOWNSHIP	HIGHWAY	SIZE OF AREA	DESCRIPTION OF AREA	PRESENT USE OF AREA
Clark Trail - of the Lewis & Clark Expedition	Historic	T1S,R10E	Co. rd. from US#89 8 mi. NE of Livingston	1 ac.	Clark camped here on July 15, 1806	Private ranch
Fort Parker	Historic	T1S,R11E	Co. rd. up Mission Cr.	10 ac.	No buildings left	Private ranch
Indian Battle	Historic	T1S,R11E	I 90	1 ac.	Location where John Bozeman was killed by Indians	Private ranch
Cokedale	Historic	T2S,R8E	Co. road	--	Coke ovens	Private ranch
Emigrant Creek	Historic	T6S,R8E	Co. road	--	Early placer mining & dredging area	National Forest & Private
Buffalo Jump	Historic	T7S,R7E	U.S.#89	1 ac.	old buffalo jump	Private ranch
Independence	Historic & scenic	T7S,R12E	jeep road	10 ac.	Old mining camp, some buildings standing	National Forest
Aldridge	Historic & scenic	T9S,R7E	Private road part way	10 ac.	Old mining camp, buildings still exist	Private ranch
Jardine	Historic & scenic	T9S,R9E	County Road	50 ac.	Old mining camp	Some people still live there
Electric-coke ovens	Historic	T9S,R8E	U.S. #89	--	Old coke ovens	Private land
Chalk cliff	Natural	T8S,R15E	Old highway E. of river So. of Living- ston	--	Geology & fossil study area	Private ranch

Granite Peak	Natural & Scenic	T8S,R15E	--	--	Highest mountain in Montana 12,850 ft. elevation, first climbed in 1923	National Forest
Devils Slide	Natural & Scenic	T8S,R8E	US#89	--	Geological Area	Private ranch
Hunters Hot Springs	Natural	T1S,R12E	County Road	--	Indoor swimming & picnicing	Private
Grasshopper Glacier	Natural	T8S,R15E	--	--	Grasshoppers preserved in ice	National forest
Chico Hot Springs	Natural	T6S,R8E	County Road	--	Outdoor swimming & other recreation	Private
Bridger Range	Scenic	--	NW of Livingston	--	Mountain range	National Forest & Private
Crazy Mountains	Scenic	--	NE of Livingston	--	Mountain Range	National Forest & Private
Gallatin Range	Scenic	--	SW of Livingston	--	Mountain range	National Forest & Private
Absaroka Range	Scenic	--	SE of Livingston	--	Mountain range	National Forest & Private

APPENDIX B
INVENTORY OF POTENTIAL IMPOUNDMENT SITES
POTENTIAL

<u>Identity of Site</u> Name	Location	<u>Estimated Size</u>		<u>Source of Water</u>	
		<u>Area</u> Acres	<u>Volume</u> (Acre Ft.)	<u>Drainage Area</u> (Acres)	
Mill Creek	T6S, R9E	181	7617	145 sq. miles	
Trail Creek	Upper Trail Creek	100	1500	-----	
Shields River Ranch (Horse Camp Site)	T4N, R9E	200	2700	90 sq. miles	
Flathead	Flathead Creek	200	5000	-----	
Daisey Dean	Daisey Dean Creek	61	220	12 sq. miles	
Cottonwood	15 mi. NE of Clyde Park	56	1700	14 sq. miles	

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